



Summary of Fishery Surveys Perch Lake, Rusk County, 2008

WDNR's Fisheries Management Team from Park Falls completed an electrofishing survey in spring 2008 to assess the abundance and size structure of largemouth bass and bluegill populations. This survey also yielded some useful information on black crappies. Quality, preferred, and memorable sizes referenced in this summary are based on standard proportions of world record lengths developed for each species by the American Fisheries Society. "Keeper size" is based on known angler behavior.

Survey Effort

On May 27, 2008, with water temperature at 63°F, our survey was well-timed to capture the target species during their spawning activities. We sampled all fish species in a complete shoreline circuit (0.87 mile) in 0.40 hour.

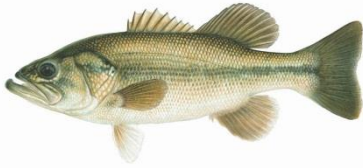
Habitat Characteristics

Perch Lake is a 23-acre drainage lake surrounded entirely by Rusk County Forest land in the Blue Hills region of Rusk County about 9½ miles southeast of Birchwood, WI. It has a maximum depth of 40 feet, and the water is moderately clear (Secchi depth=5 feet). The substrate is 95% muck and the remainder is a mix of sand, gravel, and rock. Shoreland vegetation is mainly hardwoods and conifers with smaller areas of bog and swamp. An intermittent stream drains from Audie Lake into the west side of Perch Lake, and an outlet on the east shore is the first order headwaters of Big Weirgor Creek. There is no private development, but Rusk County Forestry Department maintains a boat landing, campground, and picnic area on the south shore.

Summary of Results

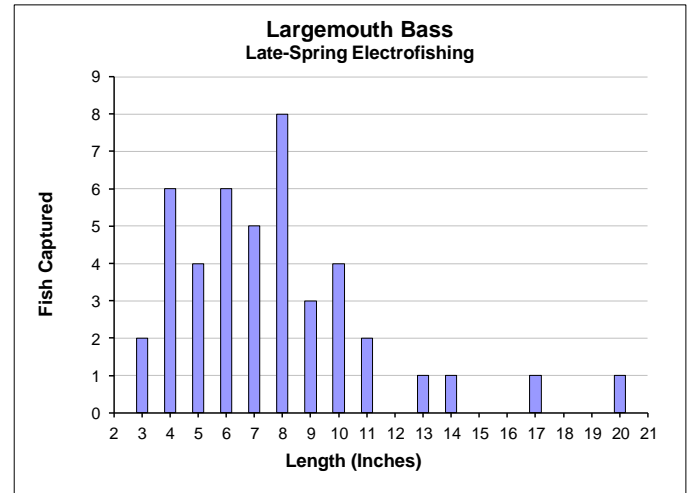
We captured only five fish species and did not observe any pike or minnows during our electrofishing survey. Largemouth bass were the principal predators and bluegills were the main panfish species. We also captured black crappies, pumpkinseed, and yellow perch in low abundance.

Largemouth Bass



Late Spring Electrofishing

Captured 24 per mile or 53 per hour $\geq 8"$	
Quality Size $\geq 12"$	19%
Legal Size $\geq 14"$	14%
Preferred Size $\geq 15"$	10%



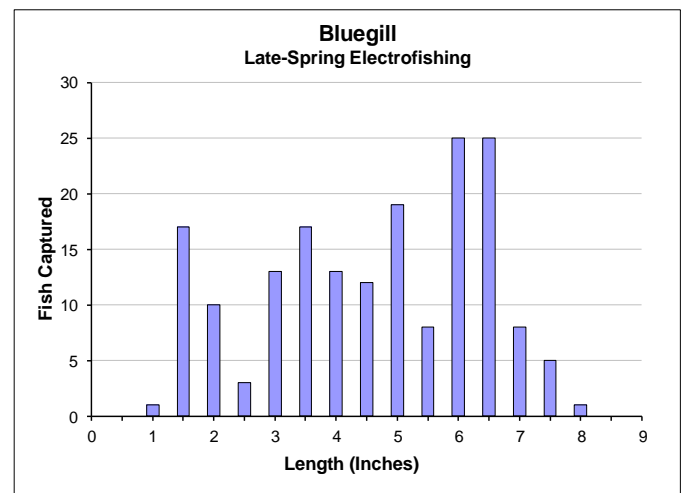
We captured largemouth bass at a rate that indicates a moderate population density. Most of the bass captured were less than 10 inches long. Based on the high proportion of small and presumably young bass in our sample, we speculate that this population may be recovering from winterkill (unusually high mortality resulting from dissolved oxygen depletion during the ice-covered period). Though we have no recent winter oxygen measurements from Perch Lake to support our suspicion, winterkill may have occurred 4-5 years prior to our survey, leaving only a few large adults that then produced several successive year classes. Anglers can expect fast fishing action for small bass and still have a chance at catching memorable-size fish.

Bluegill



Late Spring Electrofishing

Captured 168 per mile or 365 per hour $\geq 3"$	
Quality Size $\geq 6"$	44%
Keeper Size $\geq 7"$	10%
Preferred Size $\geq 8"$	0.7%

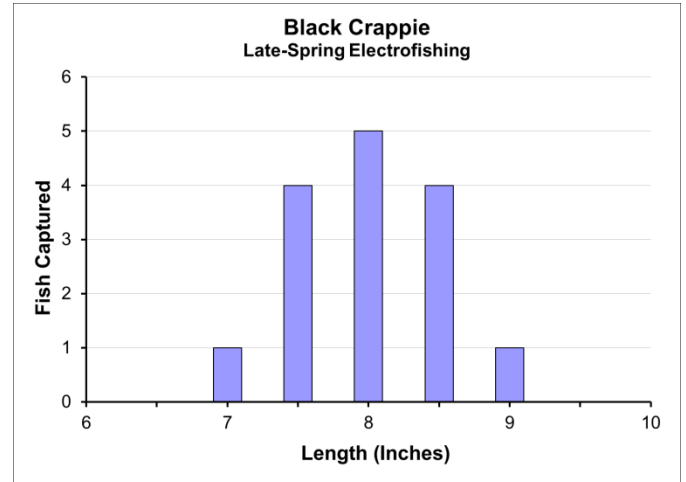


Electrofishing indicated a bluegill population at moderately high abundance with poor size structure. We did not compare their lengths to regional averages at the same ages, but competition for food and space is undoubtedly slowing the growth rate of individual fish and suppressing the population's share of bluegills that anglers want. If largemouth bass density eventually increases to a level that is capable of curbing bluegill abundance, then proportions of keeper- and preferred-size bluegills in Perch Lake might someday approach those we found in lakes of similar size where abundant, slow-growing largemouth bass exert the predatory pressure required for good bluegill fishing.

Black Crappie



Captured 17 per mile or 38 per hour $\geq 5"$	
Quality Size $\geq 8"$	67%
Preferred Size $\geq 10"$	0%
Memorable Size $\geq 12"$	0%



Our low capture rate indicated low black crappie population abundance. With water temperature within the range of black crappie spawning, our survey was well timed to capture adults in shallow water. With such a small sample it is difficult to evaluate the population's size structure, though we found no preferred-size crappies longer than 10 inches.

Survey data collected and analyzed by: Jessica Krajniak, Greg Rublee, and Jeff Scheirer - WDNR Fishery Team, Park Falls.

Written by: Chad Leanna— Fishery Technician, February 2015.

Reviewed by: Jeff Scheirer—Fishery Biologist, February 2015.

Approved for web posting by: Mike Vogelsang--acting Hayward Field Unit Supervisor, February 2015.

WISCONSIN CONSERVATION DEPARTMENT

LAKE SURVEY MAP

LAKE PERCH
 SECTIONS 36, 1
 TOWNSHIP T-35, 36-N
 RANGE R-9-W
 TOWN WILSON
 COUNTY RUSK

LEGEND

TOPOGRAPHIC SYMBOLS

- (B) Brush
 (PW) Partially wooded
 (W) Wooded
 (P) Pastured
 (A) Agricultural
 (C) Cleared
 • Dwelling
 B.M. Bench Mark
 ||||| Steep slope
 --- Indefinite shoreline
 --- Marsh
 --- Spring
 --- Permanent Inlet
 --- Permanent outlet
 --- Intermittent stream
 --- Dam

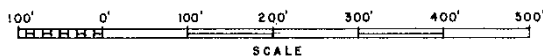
SPECIES OF FISH			
	Abundant	Common	Rare
Muskie			
N. Pike			
Walleys			
L.M. Bass		X	
S.M. Bass			
Panfish	X		
Trout			

LAKE BOTTOM SYMBOLS

- Mk. Muck P. Peat
 Sd. Sand C. Clay
 Gr. Gravel M. Marl
 Br. Bedrock R. Rubble
 T Submergent vegetation
 I Emergent vegetation

B.M. "X" 100.00'
 Water Elev. 96.00'
 Spike in Soft Maple on
 edge of loading ramp
 of access

FIELD WORK BY: L.M. SATHER
 DRAWN BY: E.W. EATON
 LAKE MAPPED 3 / 27 / 64
 SOURCE OF INFORMATION W. C. D.
 SOUNDINGS RECORDING SONAR
 TOTAL ALK. 12 P.P.M.



◇ ACCESS ◇ ACCESS WITH PARKING ◇ BOAT LIVERY

AREA 22.6 ACRES
 TOTAL SHORELINE 98 MILES
 MAX. DEPTH 40 FEET
 SCALE: AS SHOWN